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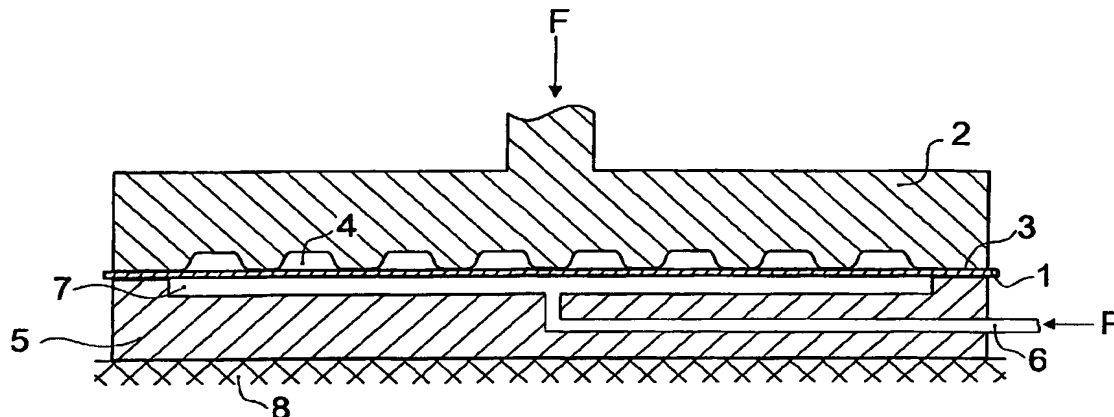
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23 September 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR FORMING A SEPARATOR PLATE FOR A FUEL CELL, AND SEPARATOR PLATE



(57) Abstract: The invention relates to a method for forming a separator plate for a fuel cell, which separator plate has a number of projecting sections. According to the invention, the projecting sections in the separator plate are formed by a metal plate being pressed onto a die having a number of recessed sections with the aid of a pressurized fluid or by the die being pressed onto the metal plate supported by pressurized fluid, the recessed sections in the die corresponding to the projecting sections which are to be formed in the metal plate, in order to obtain the separator plate having the projecting sections. The invention also relates to a separator plate produced using the method.

PATENT COOPERATION TREATY

22-10-2004
22-10-04

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

To:
CORUS TECHNOLOGY BV
Attn. Kruit, Jan
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NETHERLANDS

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

22 OCT 2004

Date of mailing
(day/month/year)

30/09/2004

Applicant's or agent's file reference

CO 167 PCT/Kr/H

FOR FURTHER ACTION

See paragraphs 1 and 4 below

International application No.

PCT/NL 03/00799

International filing date
(day/month/year)

13/11/2003

Applicant

CORUS TECHNOLOGY BV

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
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For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

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Within **19 months** from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

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Name and mailing address of the International Searching Authority



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INTERNATIONAL SEARCH REPORT

International Application No

T/NL 03/00799

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M8/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 299 999 B1 (VON HELMOLT RITTMAR ET AL) 9 October 2001 (2001-10-09) claims 1-16	1-20
A	US 2002/086196 A1 (OHTANI TERUYUKI ET AL) 4 July 2002 (2002-07-04) claims 1-3	1-20

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

23 July 2004

Date of mailing of the international search report

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Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/NL 03/00799

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6299999	B1	09-10-2001	AT 231290 T 15-02-2003
		CA 2264815 A1 12-03-1998	
		WO 9810477 A1 12-03-1998	
		DE 59709164 D1 20-02-2003	
		DK 925613 T3 22-04-2003	
		EP 0925613 A1 30-06-1999	
		ES 2191195 T3 01-09-2003	
		JP 2000517466 T 26-12-2000	
		NO 990655 A 11-02-1999	
US 2002086196	A1	04-07-2002	JP 2002175818 A 21-06-2002